



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829
James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026

PAT QUINN, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217-558-2012

March 1, 2011

Springfield Metro Sanitary District
3017 North 8th Street
Springfield, IL 62707

RE: Immediate Requirement to Reapply for Year-Round Disinfection Exemption – Springfield Metro Sanitary District Spring Creek Sewage Treatment Plant
NPDES No. IL0021971

Dear Sir or Madam:

This letter is to inform you that the existing year-round disinfection exemption for your facility will undergo review to determine whether the exemption may be extended to the renewed permit or must be revoked. In order for the Illinois EPA to evaluate the continuation of the exemption, **you must reapply for the exemption using the attached form prior to submitting a permit renewal application.**

Four fecal coliform analyses, on samples collected at least one week apart, must be performed on the final effluent. The laboratory performing the analysis must be informed that an undisinfected effluent is involved so that the proper dilutions may be performed. Too numerous to count (TNTC) or “greater than” results will not be accepted. Results must be reported as fecal coliform bacteria per 100 mL in the place provided in the application form.

Ideally, these samples should be collected during warm weather. May through October would be the best time period for collection. If your effluent does not discharge during these months, or samples will be impossible to collect before permit renewal, send a letter to the following address explaining the circumstances that prevent you from collecting fecal coliform data. Include a statement in the letter indicating your intentions to either provide the data and completed application form at a later date, or that the year-round exemption is no longer desired.

If you do not reapply or provide an explanation for anticipated delay, the renewed permit will contain a compliance schedule for disinfection of the effluent from May through October to take effect 18 months from the effective date of the permit. If chlorine is used for disinfection, a chlorine limit requiring dechlorination of the effluent will also be included.

Additionally, the application form requires a review of recreational use of the receiving stream, an unnamed tributary of Sugar Creek from the discharge to the confluence with Sugar Creek and thence to the confluence with the South Fork Sangamon River. Follow the instructions at Section 4 of the application form using this stream segment for your assessment of receiving water uses.

Send the completed form to: Bob Mosher #15, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, IL 62794-9276. If you have further questions, please contact me at 217/558-2012.

Sincerely,

Robert Mosher, Manager
Water Quality Standards Section
Bureau of Water

Rockford • 4302 N. Main St., Rockford, IL 61103 • (815) 987-7760

Elgin • 595 S. State, Elgin, IL 60123 • (847) 608-3131

Bureau of Land – Peoria • 7620 N. University St., Peoria, IL 61614 • (309) 693-5462

Collinsville • 2009 Mall Street, Collinsville, IL 62234 • (618) 346-5120

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Champaign • 2125 S. First St., Champaign, IL 61820 • (217) 278-5800

Marion • 2309 W. Main St., Suite 116, Marion, IL 62959 • (618) 993-7200

Bm



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PAT QUINN, GOVERNOR

DIRECTOR

217/558-2012

July 5, 2011

Mr. Jeff Slead
Springfield Metro Sanitary District
3017 North Eighth St.
Springfield, IL 62707

RE: Continuation of Year-Round Disinfection Exemption
Springfield Metro Sanitary District Sugar Creek Sewage Treatment Plant
NPDES Permit No. IL0021971

Dear Mr. Slead:

Fecal coliform bacteria data from your facility has been received by Illinois EPA DWPC as part of the information submitted in the Effluent Disinfection Exemption Request Form dated June 21, 2011. The average fecal coliform bacteria concentration of the effluent was 2,479 cells per 100 mL, about the same as the counts existing at the time of the original year-round disinfection exemption decision (2,326 cells/100mL). Fecal coliform bacteria are predicted to die-off to the level of the water quality standard in Sugar Creek at the confluence with the South Fork Sangamon River.

According to the above mentioned application, Sugar Creek downstream of the plant outfall has been determined to be unsuitable for primary contact activities such as swimming. Sufficient depth sufficient to support swimming is not present in Sugar Creek. Incidental contact is not predicted to occur on a regular basis due to the receiving stream being remote from parks, schools or residential areas. This condition was confirmed through satellite imagery included with the application.

Given the bacteria counts now present in the effluent and the isolated and shallow nature of the receiving stream, it is the conclusion of Illinois EPA that the year-round exemption continues to be in accord with 35 IAC Part 378. The DWPC Permit Section will be notified of this conclusion and will issue a draft NPDES permit recognizing the year-round exemption. Upon completion of the public notice process, the year-round exemption may then be continued to the renewed permit.

If you have any questions about the year-round disinfection exemption, please contact me at the above number.

Sincerely,

Robert Mosher
Water Quality Standards
Division of Water Pollution Control

cc: Rick Pinneo
Manager, FOS Region 5

3017 North Eighth Street
Springfield, Illinois 62707
217-528-0491 TEL
217-528-0497 FAX



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Robert Mosher
Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
Springfield, Illinois 62794-9276

Re: NPDES Permit No. IL 0021971
Springfield Metro Sanitary District
Sugar Creek Sewage Treatment Plant
Year Round Disinfection Exemption

RECEIVED
JUN 22 2011
Watershed Management Section
BUREAU OF WATER

The Springfield Metro Sanitary District (SMSD) received the attached letter from IEPA dated March 1, 2011 regarding the review of the Sugar Creek plant disinfection exemption. Stream assessments for disinfection exemptions are required to take place between May and October per that letter and the requirements of 35 IL Adm. Code 378, and are required to be submitted prior to submitting a NPDES permit renewal.

At this time, we have only been able to complete a limited survey of the stream due to a very wet spring. However, our renewal application for our current NPDES permit is due to be submitted at the end of this month, and we are therefore submitting the survey data gathered to date and other required documentation prior to submitting the NPDES permit renewal. Our current stream assessment efforts include a review of high resolution aerial photography along the entire length of the stream, and site visits to areas assessable by roadway. A summary of this information is included with the exemption application. Plans to travel the whole stream segment to measure stream depths and to take photographs were delayed due to the weather / flooding.

Please also find enclosed a completed copy of the Effluent Disinfection Exemption Request Form, and fecal coliform sampling results from the last 16 months. Please advise us if the information provided is sufficient, or if you would like us to conduct further assessment upon more suitable stream conditions.

Sincerely,
SPRINGFIELD METRO SANITARY DISTRICT

Jeff Sleed
Director of Operations



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PAT QUINN, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217-558-2012

March 1, 2011

Springfield Metro Sanitary District
3017 North 8th Street
Springfield, IL 62707

RECEIVED

MAR 07 2011

SPRINGFIELD
METRO SANITARY DIST.

RE: Immediate Requirement to Reapply for Year-Round Disinfection Exemption – Springfield Metro Sanitary District Spring Creek Sewage Treatment Plant
NPDES No. IL0021971

Dear Sir or Madam:

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Send the completed form to: Bob Mosher #15, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, IL 62794-9276. If you have further questions, please contact me at 217/558-2012.

Sincerely,

Robert Mosher, Manager
Water Quality Standards Section
Bureau of Water

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Marion • 2309 W. Main St., Suite 116, Marion, IL 62959 • (618) 993-7200



Illinois Environmental Protection Agency

Page 1 of 4

Bureau of Water • 1021 N. Grand Avenue E. • Box 19276 • Springfield • Illinois • 62794-9276

Effluent Disinfection Exemption Request Form

In order to obtain a seasonal or year-round disinfection exemption pursuant to 35 Ill. Adm. Code 378.103, an Applicant must submit to the Illinois Environmental Protection Agency ("Illinois EPA") a Disinfection Exemption Request Form ("Request Form"). The Illinois EPA will review the Request Form to determine if the applicant has demonstrated whether the receiving waters made subject to the exemption meet the Subpart B requirements of 35 Ill. Adm. Code Part 378.

This Request Form **must** be completed by the Applicant in order for a disinfection exemption to be granted and recognized in the NPDES permit. In addition, the Applicant may be required to re-submit a new Request Form at their NPDES permit renewal to continue the existing exemption if the Applicant is so directed by the Illinois EPA.

You may complete this form online, save a copy, print, sign and mail it to the address above.

Section 1: General

Disinfection exemptions are either seasonal, with disinfection required from May 1 through October 31, or year-round, with no disinfection required throughout the year.

This application request is for: ☐ Seasonal Disinfection Exemption Request
☒ Year-round Disinfection Exemption Request

Name and Address of Applicant's Facility

Name: Springfield Metro Sanitary District Sugar Creek STP Address 1: 3300 Mechanicsburg Road
Address 2: _____ City: Springfield
State: IL Zip Code: 62707 Phone Number: 217-528-0491

Note: The person signing this form for the Applicant must be authorized under 35 Ill. Adm. Code 309.103(e) and must give their name, title and address in the space below.

Name of Applicant/Facility: Springfield Metro Sanitary District
Name of Authorized Person: Jeff Slead
Title: Operations Supervisor
Address 1: 3017 North 8th Street Address 2: _____
City: Springfield State: il Zip Code: 62707
Email Address: jwslead@smsd.gs Phone Number: 217-528-0491

I, the undersigned, attest that this form has been completed by me or by others under my direct supervision and that the information contained herein is, to the best of my knowledge, true and correct. I understand that undisinfected wastewater is unsafe for human exposure during recreation. My signature attests to the fact that the elements of Part 378 of Title 35 of the Illinois Administrative Code are provided for the Illinois EPA's evaluation. I further understand that failure to provide any and all necessary information may result in harmful exposure to others for which I may be personally liable.

I understand that it is a Class A misdemeanor to knowingly submit any false information on this document under Section 44 (a) of the Act (415 ILCS 5/44(a) (2008)).

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent conviction is a Class 3 felony. (415 ILCS 5/44(h)).

Jeff W. Slead
Signature of Authorized Person

6/21/11
Date

Section 2: Facility Information

NPDES Permit Number issued for this facility's discharge: IL00 21971

Expiration Date of NPDES Permit: Dec. 31, 2011

Outfall number for which exemption request applies (wet weather flow outfalls do not qualify for disinfection exemptions):

STP Outfall 008

Facility Design Average Flow 10 MGD

Location of facility: 31 16N 04W County: Sangamon
Section Township Range

Applicant must provide a copy, identified as Exhibit A, of :

1. A topographic map, aerial photograph, OR satellite image of the facility, which **CLEARLY** marks the receiving stream and effluent outfall location in relationship to the receiving water. ☒ Topographic map, aerial photo or satellite image

AND

2. A process flow diagram of the facility. ☒ Process flow diagram

Section 3: Effluent Data

Effluent Data Requirements:

- The Applicant must provide at a minimum (4) four fecal coliform bacteria results (number of cells per 100 mL effluent) for the undisinfected effluent. If the effluent is currently disinfected, samples must be obtained at a point after final treatment and before chlorine and other disinfection is applied.
- For year-round exemptions, samples of the effluent must be collected between **May 1 and October 31** and at least one week apart. For seasonal exemptions the data is collected between **November 1 and April 30** and at least one week apart.
- Fecal coliform counts from the effluent must be expressed in number of bacteria cells present. Results such as "too numerous to count" **are NOT acceptable.**

Include all results obtained for the effluent for the year prior to the signature date of this application. If there are more than four sample(s), include as an attachment labeled Exhibit B. Illinois EPA will model the die-off of the fecal coliform bacteria levels present in the effluent and determine whether this die-off is sufficient to assure that recreational or drinking water supply uses identified in Section 4 are not impacted.

	Date	Result (cells per 100 mL)
1.	<u>See Attached Exhibit B</u>	<u></u>
2.	<u></u>	<u></u>
3.	<u></u>	<u></u>
4.	<u></u>	<u></u>

Application for seasonal applicants is now complete. Year-round applicants should continue to Section 4.

Section 4: Assessment of Receiving Water Uses

Renewal Applicants: Please carefully review the cover letter provided with this application form for identification of the downstream end point of the Receiving Water that the investigation below will need to include. This investigation will allow the Applicant to fully and accurately respond to the inquiries within the Request Form.

New Applicants: If needed, conduct a survey to a logical downstream point, such as the next larger stream in the downstream continuum. The end point is dependent on the volume of the discharge and the fecal coliform count of the effluent among other factors. Once the fecal coliform data required in Section 3 has been obtained, Illinois EPA can run the bacteria die-off model to find the downstream point where the recreation survey ends.

Primary Contact Information [Please Read Before Continuing On to Parts A, B, and C]:

The following information is required to allow the Illinois EPA to determine if a year-round disinfection would constitute a risk to persons using a receiving water for primary contact recreational activities. "Primary Contact" activities may include, but are not limited to, swimming, water skiing, and/or other whole body contact water recreational activities. The "Receiving Water", for purposes of this form, is the water body receiving the discharged effluent from this wastewater treatment facility, and any downstream waters affected by effluent bacteria. See 35 Ill. Adm. Code 378.202, 378.203 and 378.204 for the regulatory language guiding the Agency's decision.

Beyond physical characteristics that allow primary contact, even very small Receiving Water bodies need to be evaluated for access by the public, especially children. Any contact activity at a predictable frequency may be defined as a "protected water" under the fecal coliform water quality standard. These protected waters are water bodies that flow through or are adjacent to parks and residential areas and are likely to create a risk of incidental or accidental contact.

Year-round Applicants: Please Complete Parts A, B, C and D

Part A. Please check all boxes that apply and provide explanations in the space provided.

- ☐ The depth of the Receiving Water is less than 2 feet.

Please state the average depth of the water: Could not be surveyed due to conditions.

- ☐ Deep pools are present in the Receiving Water.

Please state the depth in feet and inches of any deep pools _____ ft _____ in.

- ☐ Indications of primary contact (as described above) such as swings, platforms, or any other signs of swimming are present in the Receiving Water.

Please provide information of any primary contact that has been identified:

No indications of Primary Contact where observed. See Exhibit C for details.

- ☒ The Receiving Water contains obstructions (such as fences, industrial settings, log jams, etc.) that may prevent access or primary contact activities within the water.

Please state what obstructions are in the Receiving Water that may prevent access or discourage primary contact activities:

Most observed areas of the creek have steep banks and/or rip rap which make access to the water difficult.

- ☒ The Receiving Water is adjacent to land that discourages primary contact activities such as industrialized surrounding; including but not limited to high traffic waterways, active mines, or demolition areas) within the Receiving Water.

Please state what adjacent land uses discourage Receiving Water primary contact activities:

Dense woods and agricultural land surround most of the stream from the plant site to the confluence of the South

Fork Sangamon River. Two roads cross the section of Sugar Creek under review, and neither have accessible areas to park near the bridge.

Part B. Survey. The Applicant must conduct a Survey of the Receiving Water. The Survey should identify any possible or potential primary contact uses of the Receiving Water. **The Survey Report must be attached as Exhibit C to this application form.** Descriptions of the Receiving Water must include the following:

1. Photographs of various representative sections of the Receiving Water must be attached and included with Exhibit C. Additionally, photographs of any deeper pools identified within the Receiving Water should be included. Photographs may be provided as either color prints or on digital media;

AND

2. Where physical features of the water body are questionable as to whether primary contact is possible, local public officials familiar with the water body and its uses shall be interviewed and asked if primary contact activities at the Receiving Water exist. Local law enforcement, property owners, and/or public officials living nearest the water body are the most appropriate individuals for these interviews. Interview transcripts or letters from these individuals should be included with Exhibit C.

Part C. Check all adjacent land uses that apply to the Receiving Water downstream of the effluent discharge and include any pertinent descriptive comments:

☒ Residential Areas:

Two homes are adjacent to Sugar Creek near the Oaklane Road bridge. The bank is very steep in this area.

☒ Commercial, Industrial, Institutional:

Whalen trucking is located on Oaklane Road adjacent to Sugar Creek. Interstate 72 runs adjacent to Sugar Creek for approx. 0.5 mile.

☐ Parks or Schools:

None

☒ Agricultural or Rural:

The remainder of the receiving water under review is bordered by agricultural fields and rural wooded areas.

Part D. If it is believed that no reasonable opportunity for incidental or accidental contact exists, include a statement to this effect in Exhibit C.

Send this form and Exhibits A, B (if necessary) and (for year-round exemption) C to:

Illinois Environmental Protection Agency
Water Quality Standards, Section #15
P.O. Box 19276
Springfield, IL 62794-9276

For questions involving the Request Form, please call the Water Quality Standards Section at 217/558-2012.

SMSD Sugar Creek WWTP Disinfection Exemption Application

Exhibit B - Effluent and Receiving Stream Sampling Data

All Values are Fecal Coliform in cells per 100 mL

Date	Sugar Creek Upstream	Plant Effluent	Sugar Creek Downstream
01/12/10	40	700	660
02/02/10	50	1230	90
02/17/10	100	1175	90
02/23/10	40	2300	130
03/02/10	10	1230	195
03/09/10	0	6100	390
03/16/10	10	1330	300
03/23/10	20	520	80
03/30/10	10	330	440
04/06/10	60	900	450
04/20/10	120	330	150
04/27/10	470	830	1000
05/04/10	70	3500	110
05/11/10	235	7300	2050
05/18/10	735	2100	680
05/25/10	125	410	1000
06/02/10	670	9900	11700
06/08/10	390	3200	170
06/15/10	420	10000	1485
06/22/10	1900	14700	2105
06/29/10	250	1980	460
07/07/10	530	2000	420
07/13/10	230	1510	260
07/27/10	175	5800	160
08/03/10	230	1600	160
08/10/10	180	1075	280
08/17/10	160	415	745
08/24/10	385	320	470
08/31/10	490	5300	5800
09/08/10	220	1385	680

Date	Sugar Creek Upstream	Plant Effluent	Sugar Creek Downstream
09/14/10	150	470	340
09/21/10	150	6300	870
09/28/10	1150	290	4900
10/05/10	95	2300	500
10/12/10	70	140	210
10/19/10	60	818	150
10/26/10	73	62	2000
11/02/10	90	140	740
11/09/10	110	20000	2200
11/16/10	240	470	250
12/07/10	110	1800	200
12/21/10	50	660	250
01/04/11	110	530	130
01/25/11	70	1050	250
02/15/11	120	2900	330
02/23/11	10	2000	50
03/01/11	10	845	10
03/08/11	10	4300	420
03/15/11	10	5600	60
03/22/11	10	760	550
03/29/11	20	290	10
04/05/11	140	825	410
04/12/11	260	260	1090
04/20/11	1035	770	1638
04/26/11	160	1860	1140
05/03/11	50	730	1600
05/10/11	60	260	80
05/17/11	110	10	560
05/24/11	140	370	470

56310

Exhibit C – Receiving Water Survey

A limited survey of receiving waters of the Springfield Metro Sanitary District (SMSD) Spring Creek Sewage Treatment Plant has been completed. Receiving waters of the plant refers to an unnamed tributary of Sugar Creek from the discharge to the confluence with Sugar Creek and thence to the confluence of Sugar Creek and South Fork Sangamon River. The survey included a study of aerial photographs of the area, inspections of bridge crossings over Sugar Creek, and an interview with a local homeowner. A planned boat survey of the receiving waters was unable to be completed due to unfavorable weather conditions. The survey has found no evidence of primary contact use in the receiving waters. Adjacent land use and physical obstacles in the water discourage primary contact activities.

The unnamed tributary of Sugar Creek from the SMSD Spring Creek Sewage Treatment Plant discharge to the confluence with Sugar Creek is bordered by agricultural land and wooded area. The only access to this section of water is a private road on SMSD property. Adjacent land use and lack of access discourages primary contact activities in the unnamed tributary.

Sugar Creek from the confluence with the unnamed tributary to the confluence with the South Fork Sangamon is bordered primarily by agricultural land and wooded area. Two roads, Oaklane Road and Mechanicsburg Road, cross this section of Sugar Creek. There are no parking areas near either of the bridges. Aerial photos along Sugar Creek from the SMSD property downstream to the confluence with the Sangamon River are included in Exhibits 1 through 7.

Two residences and a trucking company are located adjacent to Sugar Creek near the Oaklane Road Bridge. The homeowner of one of the houses was interviewed. He stated he has observed people fishing off the bridge, but never swimming in Sugar Creek. The area near the bridge was inspected. Fishing line was found in trees near the bridge, and a couch, likely dumped off the bridge, was near the edge of the creek. No signs of primary contact activities were observed. Near Mechanicsburg Road Bridge, Sugar Creek is bordered by agricultural land and wooded area. There are no residences adjacent to the creek, and no signs of fishing or swimming were found here. Mechanicsburg Road is a high-speed, heavy-traffic road, which likely makes fishing from the bridge dangerous and unappealing.

Physical obstructions, such as steep sloped banks and banks covered in rip rap, were observed near both bridges. Aerial photos show log jams at several locations in Sugar Creek. These obstructions discourage primary contact activities. Figures 1 through 9 contain images documenting these observations.

No evidence of primary contact activities has been observed near the receiving waters of the SMSD Spring Creek Sewage Treatment Plant. Aerial photographs, inspections near bridge crossings, and an interview with a local homeowner suggest adjacent land use and physical obstacles in and near the water discourage primary contact activities. The survey concludes no reasonable opportunity for incidental or accidental contact exists in the receiving waters.

Figure 1 – Sugar Creek at Oaklane Road Bridge



Figure 2 – Sugar Creek at Mechanicsbug Road Bridge



Figure 3 – Sign Near Oaklane Bridge



Figure 4 – Sign Near Mechanicsburg Road Bridge



Figure 5 – Couch Near Oaklane Road Bridge



Figure 6 – Bank Near Oaklane Bridge



Figure 7 – Rip Rap Near Mechanicsburg Road Bridge



Figure 8 – Logjam 1 from Aerial Photos



Figure 9 – Logjam 2 from Aerial Photos



Disinfection Exemption Modeling Seasonal or Year Round

Date 1/4/12 Type of facility _____

Facility Name Springfield SD - Sugar Creek Outfall # _____

of Segments in Model 3

Recurrence frequency 0.5000

Are K values default, Y or N Y

Discharges determined by 1

1. ISWS Equations
2. USGS Gauging Stations
3. Other Methods

Velocities determined by 1

Facility, DAF (cfs) 15 MGD = 23.2 cfs

Facility undisinfected fecal count 2479

Selection number for basin eqtns. 9 Sangamon River

Season, Winter or Summer Summer

	SEGMENT #					
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>
Length, River miles	<u>0.55</u>	<u>4.3</u>	<u>0.1</u>	_____	_____	_____
Background fecal conc.	<u>100</u>	<u>100</u>	<u>100</u>	_____	_____	_____
Dilution water drainage area	<u>3.0</u>	<u>276.0</u>	<u>882.0</u>	_____	_____	_____
Drainage area @ segment end	<u>3.21</u>	<u>287.0</u>	<u>1169.0</u>	_____	_____	_____
Point source in next segment	_____	_____	_____	_____	_____	_____
Point source fecal conc.	_____	_____	_____	_____	_____	_____
Point source, DAF (cfs)	_____	_____	_____	_____	_____	_____
Segment end fecal conc.	<u>2074</u>	<u>483</u>	<u>215</u>	_____	_____	_____

Nearest downstream potential for recreational use _____

Does this stream flow through residential area or park? _____

Any downstream intake for public water supply? _____

Topographic Quad Maps _____

Comments:

Mosher, Bob

From: Mosher, Bob
Sent: Tuesday, January 10, 2012 11:17 AM
To: 'Nathan Davis'
Cc: Twait, Scott; Pinneo, Rick
Subject: RE: Springfield Metro Sanitary District Proposed Sugar Creek Expansion / Disinfection Exemption

Nathan,

We have re-modeled the bacterial die-off using the recent fecal coliform counts from the Sugar Creek Plant and the design average flow of the proposed expanded plant. We got a result that shows die-off to be very close to the water quality standard at the confluence with the Sangamon River. This being the case, we have decided to extend the year-round disinfection exemption to the expanded plant with conditions. When the expanded plant is up and running, the permit will require fecal coliform data to be analyzed and then a decision will be made to keep or revoke the year-round exemption. If the expanded plant achieves fecal coliform averages just a little lower than the existing plant, then the year-round exemption is appropriate. New plants often do better at fecal control because of better solids removal. Delaying the final decision seems to fit with your plan to leave a foot print for future effluent disinfection at the plant. If it is decided in the future to require seasonal disinfection, the permit will be modified and will include a compliance schedule to achieve the disinfection.

Bob Mosher
Water Quality Standards Unit, Division of Water Pollution Control
Illinois EPA
1021 North Grand Ave. E.
P.O. Box 19276
Springfield, IL 62794-9276
217/558-2012
217/782-5549 (Fax)

From: Nathan Davis [mailto:ndavis@cmtengr.com]
Sent: Wednesday, January 04, 2012 12:08 PM
To: Mosher, Bob
Subject: Springfield Metro Sanitary District Proposed Sugar Creek Expansion / Disinfection Exemption

Bob,

I spoke with you on the phone last month regarding the proposed expansion of the SMSD Sugar Creek WWTP (NPDES permit number IL0021971), but never followed up with some information that you requested. SMSD is currently working on a facility plan to expand the Sugar Creek WWTP. They recently went through the process of reevaluating the disinfection exemption for the existing facility as part of the permit renewal. The facility plan will include a conceptual design and associated costs for UV disinfection. The hydraulic profile and site layout is being set such that the disinfection could be added a later time if it is not included in the initial construction. SMSD asked me to check with you to see if the expanded facility would still qualify for a disinfection exemption if they chose not to include the UV in the initial construction.

Could you please rerun the die-off evaluation and let me know if they would still qualify? The plant proposed expansion would result in a DAF of 15 MGD and a DMF of 37.5 MGD. The effluent bacteria concentrations would be expected to be the same as the existing facility. I've attached a copy of your July 5, 2011 response letter and a copy of the sampling results from the study for your reference.

Thank you,
Nathan Davis, P.E.

Crawford, Murphy & Tilly, Inc.

2750 West Washington Street

Springfield, Illinois 62702

217.787.8050 Voice

217.787.4183 Fax